

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

This listing of claims replaces all prior versions, and listings, of claims in this application.

Listing of Claims:

Claim 1. (Currently amended) A purified anthrax toxin B moiety of a pore-forming binary A-B toxin, wherein said B moiety comprises an amino acid sequence that is 95% identical to SEQ ID NO:8, and includes a D425K mutation, that inhibits its pore-forming ability and, wherein said mutation is not the mutation of Phe313, Phe314, or Asp315 of anthrax protective antigen or corresponding residues in B moieties other than anthrax protective antigen.

Claims 2-5. (Cancelled)

Claim 6. (Currently amended) A vaccine An immunogenic composition comprising a purified anthrax toxin B moiety of a pore-forming binary A-B toxin or a fragment thereof in a pharmaceutically acceptable carrier, wherein said B moiety comprises SEQ ID NO:8, a mutation that inhibits its pore-forming ability and, wherein said mutation is not the mutation of Phe313, Phe314, or Asp315 of anthrax protective antigen or corresponding residues in B moieties other than anthrax protective antigen

Claims 7-42 (Cancelled)

Claims 43-44 (Withdrawn)

Claims 45-48 (Cancelled)

Claim 49 (Withdrawn)

Claims 50-51 (Cancelled)

Claim 52. (New) A purified anthrax toxin B moiety, wherein said B moiety comprises an amino acid sequence that is 95% identical to SEQ ID NO:10 and includes a K397D + D425K double mutation in said B moiety.

Claim 53. (New) A purified anthrax toxin B moiety, wherein said B moiety comprises an amino acid sequence that is 95% identical to SEQ ID NO:11 and includes a K395D + K397D + D425K + D426K quadruple mutation in said B moiety.

Claim 54. (New) A purified anthrax toxin B moiety, wherein said B moiety comprises an amino acid sequence that is 95% identical to SEQ ID NO:13 and includes a K397D + D425K + F427A triple mutation in said B moiety.

Claim 55. (New) A purified anthrax toxin B moiety, wherein said B moiety comprises an amino acid sequence that is 95% identical to SEQ ID NO:16 and includes a K397D + D425K + F427A + deletion of amino acids 302-325 (Δ D2L2) quadruple mutation in said B moiety.

Claim 56. (New) A purified anthrax toxin B moiety, wherein said B moiety comprises SEQ ID NO:8.

Claim 57. (New) A purified anthrax toxin B moiety, wherein said B moiety comprises SEQ ID NO:10.

Claim 58. (New) A purified anthrax toxin B moiety, wherein said B moiety comprises SEQ ID NO:11.

Claim 59. (New) A purified anthrax toxin B moiety, wherein said B moiety comprises SEQ ID NO:13.

Claim 60. (New) A purified anthrax toxin B moiety, wherein said B moiety comprises SEQ ID NO:16.

Claim 61. (New) An immunogenic composition comprising a purified anthrax toxin B moiety in a pharmaceutically acceptable carrier, wherein said B moiety comprises SEQ ID NO:10.

Claim 62. (New) An immunogenic composition comprising a purified anthrax toxin B moiety in a pharmaceutically acceptable carrier, wherein said B moiety comprises SEQ ID NO:11.

Claim 63. (New) An immunogenic composition comprising a purified anthrax toxin B moiety in a pharmaceutically acceptable carrier, wherein said B moiety comprises SEQ ID NO:13.

Claim 64. (New) An immunogenic composition comprising a purified anthrax toxin B moiety in a pharmaceutically acceptable carrier, wherein said B moiety comprises SEQ ID NO:16.